

2022-2023 Summary of Course Prerequisites

The 2022-2023 AACP Course Prerequisite Summary is intended to help applicants more easily determine how the course prerequisites for Doctor of Pharmacy (Pharm.D.) degree programs overlap across colleges and schools of pharmacy in the United States. The Summary reflects the total number of semester hours pharmacy applicants must complete per subject area, as captured in the PharmCAS School [Directory](#). Some colleges and schools of pharmacy offer more than one program, pathway, or campus for Pharm.D. degree students and are represented in the Summary more than once. The Summary generally reflects the minimum number of course prerequisites per program. Pharmacy schools may have additional requirements, recommended courses, preferences, or policies that are not reflected in the Summary. Schools may also allow applicants to substitute courses or choose different prerequisite tracks. Applicants should not rely solely on this summary to determine the course prerequisites for a particular pharmacy school. Visit the PharmCAS School Directory for program-specific details and contact schools directly to determine whether a particular college course will fulfill a prerequisite.

Course Subject Descriptors:

The following descriptors are only intended to provide general guidance. Not all course subjects are described, and no school requires prerequisite courses in every subject. Schools may require specific or advanced courses in a particular subject area. Visit the PharmCAS School [Directory](#) for program-specific details.

- **Anatomy, Physiology, and Anatomy & Physiology:** Schools often accept separate anatomy and physiology courses OR combined anatomy & physiology (A&P) I and II courses. Lab requirements vary.
- **Biochemistry:** Lab requirements vary.
- **Biology/Biological Science:** General biology I & II are commonly required. Genetics or cell biology may also be required. Lab requirements vary.
- **Chemistry:** General chemistry I & II and organic chemistry I & II are commonly required. Lab requirements vary.
- **Communication/Speech (Verbal):** Public speaking or speech may be preferred or required.
- **Humanities:** General or specific courses in history, languages, literature, philosophy, the arts, or religion may be required.
- **Microbiology:** Lab requirements vary.
- **Physics:** Lab requirements vary.
- **Psychology:** General psychology is most commonly required. See also social/behavioral science.
- **Math:** Calculus (non-business) is most commonly required.
- **Social/Behavioral Science:** Psychology and/or sociology may be preferred or required.
- **Statistics:** Biostatistics may be preferred or required.

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
Albany CPHS					11	16	3						9	3	3	3			3	3	9		63
American U Hlth Sci	3	3			8	16	3		3	3				3	3		3			3		6	57
Appalachian COP	3	3			8	16				6			3	6	3	8		3	3		10		72
Auburn U			4	3	4	16				6			18	4	4					3			62
Belmont U					8	16	6			6			3	3		3			6	3	9		63
Binghamton U	4	3		0	8	16				5				3	3	4			2	3			51
Butler U-Indy			8		3	16								4	3								34
Butler U-Online			8		3	16								4	3								34
California Northstate U		3			7	16	3			6				3					6				44
Campbell U			4		4	15				6			12	3	4	4				3		8	63
Cedarville U			8		8	16	3			3				4	4	4					18		68
Chapman U	4	4			7	16	3		3	3				3	3	4			3	3	6		62
Chicago State U			6		8	16	3		3	6				3		3			3	3			54
Concordia U Wisconsin					8	16	3			3				3		3		5		3	12		56
Creighton U-Distance	3				8	16	3		3	6				3			3				18		63

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total		
Creighton U-Omaha, NE	3				8	16	3		3	6				3			3					18		63	
Creighton U-Phoenix, AZ	3				8	16	3		3	6				3			3						18		63
Duquesne U					8	16		3	3	6	3		15	4		3	3				3				67
Drake U					8	16	3			6				3	3						3	22			64
D'Youville U																									0
East Tennessee St U		4			4	16	3			6			3	3	4			3	6	3	6				61
Fairleigh Dickinson U			8	3	8	16				3				3		4					3	28			76
Ferris St U			8		8	16	3		3	6			9	3	3					3	3				65
Florida A&M U			8	3	8	16				6			6	8	4	8				6	3	6			82
Harding U					8	16	3		3	6				4	4			8	3	3	3	6			64
High Point U		4			4	16	3			6			6	3	4	3						16			65
Howard U			6	4	7	16	3			6			3	4	4	4				6		6			69
Husson U			8		8	16								3							3				38
Idaho St U			8	3	4	16			3					3	4	3					3		25		72
Idaho St U - AK			8	3	4	16			3					3	4	3					3		25		72

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
Keck Graduate Inst	4	4		3	8	16	3		3	6				3	3	3			3	3			62
Larkin U			6		8	16				3			6	3				6		3	9		60
Lebanese American U		8	4	4	4	11		2		6					3					3	15	4	64
LECOM - FL					8	16			3	6				3		3			3	3	9		54
LECOM - Online						16			3	6				3		3			3	3	9		46
LECOM - PA					8	16			3	6				3		3			3	3	9		54
Lipscomb U					8	16	3			6				3	4					3	18		61
Loma Linda U					11	16				6			12			4			12				61
Long Island U			8		8	16	3		3	6			6	4	4	4	3			3		1	69
Manchester U			3		3	12	3		3	3				3	3					3	9	12	57
Manchester U-Distance			3		3	12	3		3	3				3	3					3	9	12	57
Marshall B Ketchum U	3	3			6	12	3		3	3				3	3		3						42
Marshall U	4	4			8	16				6				3	4	4			3	3			55
MCPHS - Boston			3		11	15	3			6				3		3	3		3	3	9		62
MCPHS - Manchester			3		7	15			3	6			3	6	3	3	3		12	3			67

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total	
MCPHS - Worcester			3		7	8			3	6			3	6	3	3	3		12	3				60
Med C Wisconsin					12	15	3			3				3						3	12			51
Med U South Carolina	3	3			8	16	3			6				3	3	3	3			3	9			63
Mercer U			6	3	8	16	3		3	6			6	3	3				6	3				66
Midwestern U - AZ	3				8	16	3		3	6				3		3			6	3	8			62
Midwestern U - IL	3				8	16	3		3	6				3		3			6	3	8			62
NEOMED U			3	3	8	16				6				3	3	3				3	12			60
North Dakota St U			8	6	8	15	3		3	9			6	4	5	3			3	3		7		83
Northeastern U - BS/BA Holders			8	3	7	15							4	3		3								43
Northeastern U - Dual			8	3	7	15							4	3		3								43
Northeastern U - Early Assurance			8	3	7	15							4	3		3								43
Northeastern U - Transfer Students			8	3	7	15							4	3		3								43
Notre Dame Maryland U			6		8	16	3		3	6	3			3	4	3			6	3	3			67
Nova Southeastern U			6		8	16	3			6			3	3		3		6	3		9			66
Ohio Northern U			8	6	4	16								3		3				3				43

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Ohio St U, The		3		3	3	17								4	3					3			36
Oregon St U		4		4	8	16			3					3	3					3			44
Pacific U Oregon			8		8	16	3		3	6			3	3	3	3	3		3				62
Palm Beach Atlantic U			8	3	8	16	3		3	6				3	4					3	9		66
PCOM - GA			4		8	16	3		3	6			3	3					3	3	8		60
Presbyterian C			6		8	16				6			6	3	4	3			3	3			58
Purdue U			8	3	11	16	3		3	3				3	4	4				3			61
Regis U	3	3			12	16	3		3	3				3					6		6		58
Roosevelt U			5		6	12	3		3	6			9	3		3				3			53
Rosalind Franklin U Med Sci	4				6	12	3			6			6	3	3				6	3	3		55
Roseman U Hlth Sci	3	3				16	3			3				3	3						26		60
Rutgers U		3			9	18			3	6				4		7			3	3	12		68
Saint Josephs U Philadelphia			6		8	16	3		3	6			6	3	4	4			3	3			65
Samford U			8			16	3			6			6	4	4				3	3	9	2	64
Shenandoah U			6		14	12			3	6			3	3	3	3			3	3			59

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
South College (TN)			8		8	16	3		3	6			9	3	4				6	3			69
South Dakota St U	4	4			3	16	3		3	6				5	4					3			51
South U - GA			6		4	16				3				3				16			12		60
Southern Illinois Edwardsville			8		8	18	3		3	6				5	4	5			3	4	3		70
Southwestern Oklahoma St U	4				4	18	3	3	3	6			12	3	5	3	3						67
St. John Fisher C					12	16	3		3	6				3		4				3	12		62
St. John Fisher C Online					12	16	3		3	6				3		4				3	12		62
St. John's U			3	5	3	12	3			3	3		21	3						3		8	67
Sullivan U			3		4	16	2		2	6				3	4					3	27		70
Temple U			6		8	16			3	3			9	4		4			9	3			65
Texas A&M U					11	16	3			6			3	3	4	4			3	3		15	71
Texas Southern U			4		8	16				6				10	4	4			3			30	85
Texas Tech U HSC					8	16	3			6			15	4	4	4				3		3	66
Thomas Jefferson U			8		8	16				3			9	3	4	4			9		8		72
Touro C - NY	4	4		3	8	16	3		3	3			6	3	4	4			6				67

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
Touro U - CA		3				16								3	4								26
U at Buffalo	3	3		3	8	16				6				3	3				3	3			51
U of Arizona, The			8		4	16				6			9	3	4	3			6	3			62
U of Arkansas Med Sci					8	16								3	4			9				20	60
U of California, Irvine		3		3	3	16	3		3	3				3			3			3			43
U of California, San Diego					8	16	3		3	6				6		6			3				51
U of California, San Francisco		3			8	16	3		3	5				3	3				3	3		10	60
U of Charleston		4			8	12			3	6			3	3	4				3	2			48
U of Cincinnati			8	3	5	20				6				4	4	4				3	15		72
U of Colorado		4		3	8	16				3			8	3	2								47
U of Connecticut			8	4	4	14			3	4				4	4	4			3				52
U of Findlay, The			8		4	16	3			6	3			4		4				3	15		66
U of Florida			8	4	8	16								4	3					3			46
U of Georgia			6	3	8	16	3		3	6				3	3				6	3		9	69
U of Hawaii Hilo			8		8	16	3		3	6			6	3	4				6			3	66

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
U of Houston					11	16				6			18	4	4	3			3	3		3	71
U of HS & Pharm in St. Louis			8	3	8	16	3		3	6			3	3	4	4			3	3			67
U of Illinois Chicago			6	3	6	12	3			3			3	3	3	3			3	3		3	54
U of Iowa, The	3	3		3	8	14				4				4	4	3				3	16		65
U of Kansas, The	3	4			3	16	3			6				3	4	4				3		12	61
U of Kentucky	3	3			4	16	3			6				4	4					3	21	3	70
U of Louisiana Monroe, The			7	3	6	16	3		3	6			6	3	4	4			3	3			67
U of Maryland			6		8	16	3		3	3				3	4	4				3	12		65
U of Maryland Eastern Shore			8		4	16	3		3	6				4	4	4				3	12		67
U of Michigan	3	3		3	9	12				3			6	3	3	3			6	3			57
U of Minnesota	3	3			6	12	3			3				3	3	3			6	3			48
U of Mississippi, The	4	4		3	12	16	3		3	6	3		12	3	3	4			6	3			85
U of Missouri-Kansas City	4				9	16	3			6			3	3	4	4				3		1	56
U of Montana			6		4	18	3		3	3				4		5			3	4	12		65
U of Nebraska Med Ctr	4	4			4	16								4		4				3	21		60

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
U of New England			8		4	16	3			3			6	3	3				9		3	3	61
U of New Mexico, The			6		8	16	6		3	6				3	4	6				3	24	6	91
U of North Carolina Chapel Hill			4	3	4	16								3	3	4				3			40
U of North Texas HSC	4				11	16	3			6			15	3	4	4			3	3			72
U of Oklahoma,The					8	16				6				3	4	3					24		64
U of Pittsburgh					8	16				6			9	3					9	3	6		60
U of Puerto Rico			6		6	16	3		3	6		6	6	11		8	3		6				80
U of Rhode Island, The			8	3	4	16	3		3	3	3			3	4					4			54
U of Saint Joseph			8			16			3	3				3	4	4				3			44
U of South Carolina			6		8	16	3		3	6			9	3	3	3	3			3			66
U of South Florida			8	3	14	16			3	3			9	3	3	4			3	3			72
U of Southern California		3		3	8	16								4	3					3			40
U of Tennessee, The			8		8	16	3			6			6	3	3				6	3			62
U of Texas Austin, The					9	16				3			3	3	4	4				3		24	69
U of Texas El Paso, The			8		9	16	3			6		0	18	3	4	3			3	3		3	79

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total	
U of Texas Tyler, The			8		8	16	3							3	4									42
U of the Incarnate Word			8		4	16	3			6			12	3	4	4			3	3	2			68
U of the Pacific		4			8	16	3		3	6			6	4	3	4	3					28		88
U of Toledo, The		3			5	18				6				4		4				3				43
U of Utah	3	3				16	3							3	3	3					3	3		40
U of Washington			6	4	8	16	3		3	6			3	3	4				3	3				62
U of Wisconsin - Madison		3			7	16				3				3	3	3					3	12	19	72
U of Wyoming	4	4		4	8	16								4	4						4			48
Union U			8		8	16	3			6				3	4			4		3	6			61
Virginia Commonwealth U	3	3		3	8	16				6				3	3	4					3			52
Washington St U	4	4		4		8							12	3	4						3			42
Wayne St U			6	4	4	20	3			6				4	5	4					3		15	74
West Coast U	3	3		3	8	16	3		3	6				3	3				3	3	6			63
West Virginia U		3		3	8	16	3		3	6				3	3						3	9		60
Western New England U			8		8	16				6				3	3				3	3				50

2022-2023 Pharm.D. Degree Programs in the U.S.	Anatomy *			Prerequisites																	Grand Total			
	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics		General Elective(s)	Other	
Western New England U-Distance			8		8	16				6				3	3				3	3				50
Western U Hlth Sci		3		3	3	16	3			6				3	3								6	46
Wilkes U					8	16	3		3					4		4				3				41
William Carey U			8		8	16	3		3	6				3		3			6	3	9			68
Wingate U			4		4	16				6			12	3	4	4				3	6			62
Xavier U Louisiana					8	16	3			6	3		3	4	4	4			3	3				57

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Grand Total # of Semester Hours for All Schools	116	150	528	158	1066	2421	278	8	209	690	21	6	480	526	397	357	51	60	335	357	774	298	9286
# of Programs with Course Prerequisite in Subject	34	43	80	48	148	155	91	3	70	131	7	2	65	153	111	95	17	9	73	118	66	30	
% of Programs with Course Prerequisite in Subject	22%	28%	51%	31%	95%	99%	58%	2%	45%	84%	4%	1%	42%	98%	71%	61%	11%	6%	47%	76%	42%	19%	
Mean # of Semester Hours Required in Course Subject**	3.4	3.5	6.6	3.3	7.2	15.6	3.1	2.7	3.0	5.3	3.0	3.0	7.4	3.4	3.6	3.8	3.0	6.7	4.6	3.0	11.7	9.9	59.5
Median # of Semester Hours Required in Course Subject**	3	3	8	3	8	16	3	3	3	6	3	3	6	3	4	4	3	6	3	3	9	7.5	62

* Most colleges and schools of pharmacy (80%) require one or more courses in anatomy and/or physiology and will accept separate courses OR combined A&P I and II courses. Labs requirements vary. Visit the PharmCAS School Directory for school-specific details.

** The mean and median calculations only include programs with one or more course prerequisites in the subject.

*** Please refer to the PharmCAS School Directory for additional details.

Colleges and schools of pharmacy may change course prerequisites for the Doctor of Pharmacy (Pharm.D.) degree program at any time and may have additional requirements, preferences, or policies that are not reflected in this summary or on the PharmCAS School Directory.

Schools may also allow applicants to substitute courses or choose different prerequisite tracks. Applicants should review the PharmCAS School Directory for program-specific details and contact programs directly to determine whether a particular course will fulfill a prerequisite.

Some colleges and schools of pharmacy have more than one pathway or campus for Pharm.D. degree students.